June 26, 2019

TO: Members of the Board of Trustees

FROM: John A. Elliott
Interim Provost and Executive Vice President for Academic Affairs

RE: Certificate in Health Care Innovation

RECOMMENDATION:

That the Board of Trustees approve the Certificate in Health Care Innovation in the School of Nursing.

BACKGROUND:

With over four million registered nurses in the United States, the nursing profession holds great potential to significantly drive positive changes for the health care industry. To drive this change, nurses must be educated on how to generate and act on new ideas that address existing challenges that permeate the workplace. Nurses are often seen as natural innovators in their day to day work, these behaviors tend to live in work-arounds which illustrates gaps in system level solutions. Nurses who are equipped to develop new innovations are bringing forth new processes of care delivery, service models, and new products to meet the challenges affecting an audience at large.

The Health Care Innovation Certificate will develop future innovators and foster cultures that support a thriving environment that welcomes positive and necessary change. Beyond the nursing profession, health care colleagues in medicine, dentistry, pharmacy, and allied health can all benefit from the formalized education offered through the Certificate in Health Care Innovation. Additionally, individuals trained in disciplines outside of health care often bring forward new ideas and expertise to develop innovations but lack the domain expertise in health care. The availability of this certificate beyond nursing will further the interdisciplinary efforts of the School of Nursing.
Request for New UConn Certificate Program

Program information
Name of certificate program: Healthcare Innovation
Name of sponsoring department: School of Nursing
Name of Department Head: Tiffany Kelley PhD MBA RN
Name of sponsoring College: School of Nursing
Director of certificate program: Tiffany Kelley PhD MBA RN
Type of certificate: Post-Baccalaureate, Fee-Based, Online
CIP Code: 51
Projected annual enrollments: 10-20 Students Per Year

Program outline and description of program learning outcomes

Overview: This Health Care Innovation Certificate Program Proposal addresses an existing and growing market need to educate nurses, health care professionals, and professionals interested in solving healthcare problems, on essential theories, concepts and applications within the domain of innovation for the health care industry.

The proposed Health Care Innovation Certificate offered through the UConn School of Nursing is designed to educate individuals in nursing and beyond for the common goal of introducing positive and necessary change to the healthcare industry. While we see nurses as natural innovators in their day to day work, these behaviors tend to live in work-arounds. Nurses are proud of their work-arounds as they help deliver the necessary care to the patient. However, we now must shift this thinking to recognize the work-around is representative of an existing gap in system level solutions (Kelley, Brandon & McGrath, 2018). With this perspective in mind, we can begin to shift the culture in a way that will meet the needs of many instead of one at a time. While our primary target audience will be nurses, the knowledge learned through this program is valuable to other health care professional role groups and those who are in need of this knowledge in the context of health care to understand existing opportunities and refine existing ideas.

The proposed Health Care Innovation Certificate includes a 12 credit (4 course) post-baccalaureate online asynchronous program designed to meet the educational needs of:

1. Nurses interested in improving the care environments where they serve (will serve) as leaders.
2. Nurses interested in learning how to better solve problems (e.g., innovate) in their care environments
3. Health care professionals interested in improving and solving problems affecting their practice and/or discipline (e.g., doctors, pharmacists, dentists, physical therapists etc.)
4. Non-health care professionals seeking to understand innovation and the health care environment (e.g., engineering, business, fine arts)
Background and Opportunity

With over four million registered nurses in the United States alone (ANA, n.d.), the nursing profession holds great potential to significantly drive positive change for our health care industry (Cianelli, Clipper, Freeman, Goldstein & Wyatt, 2016; Kelley, Brandon & McGrath, 2018). To drive positive change, nurses must be educated on how to generate and act on new ideas to address existing challenges that permeate our day-to-day work environments. Nurses must also be able to support their peers and staff when new ideas are presented and not see them as being disruptive to the status quo. To behave in this manner is to be innovative (Cianelli, Clipper, Freeman, Goldstein & Wyatt, 2016).

Innovations are new products, services and/or processes introduced to the marketplace that address a need. The health care industry is in dire need of individuals who can help address the many challenges affecting our individual patients, families, communities and populations at large (Bush & Baker, 2014). Nurses who are equipped to develop new innovations are bringing forth new processes of care delivery, service models, and new products to meet the challenges affecting an audience at large. Yet, we sometimes revert to a convergent thinking model that often resembles the ‘we’ve always done it this way’ mantra. This model severely limits the possibility for innovation to grow and thrive.

In the last decade, three leading organizations recognized the value and potential of developing nurses to innovate at scale. The Institute of Medicine, American Nurses Association, and Johnson & Johnson have all set forth calls to action (ANA, n.d., Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, 2010, Johnson and Johnson Innovation, 2018). If we do not acknowledge these calls to action set forth to develop our nurses to be changemaking leaders in the industry, our professional foothold will be at risk for falling behind the contemporary times and be unable to meet the demands of our patients, families, communities and populations at large.

The contemporary United States has demonstrated that individuals have innovated in the public domain void of formal degrees (e.g., Steve Jobs, Mark Zuckerberg, Michael Dell, Bill Gates). Jobs, Zuckerberg, Dell and Gates are a few examples of innovators with major success stories. However, we cannot expect this level of success for everyone with an idea void of appropriate knowledge and skills. We can however increase the odds of success by providing the right educational tools to influence the thinking patterns and skills necessary to promote change for the benefit of a large population.

Through the Healthcare Innovation Certificate proposal, we are aiming to serve this growing need to develop future innovators and fostering cultures that support a thriving environment that welcomes positive and necessary change. Our primary intended audience of nurses are often already innovating in a small scale through workarounds. However, those workarounds are indicative of opportunities for system level solutions. How to scale these workarounds and foster the creativity found in such innovative behaviors for large scale improvements is where we can begin to support the profession. Nurses entering this program will likely begin their innovation career as intrapreneurs instead of entrepreneurs. Thus, we’ve been cautious to focus this program solely on innovation (and not entrepreneurship). For those who wish to seek out entrepreneurial endeavors, we will evaluate their needs upon completion of the certificate and their desired next steps.

Beyond the nursing profession, our colleagues in medicine, dentistry, pharmacy and allied health can all benefit from the formalized education with this health care innovation certificate to address opportunities specific to their disciplines and those requiring collaboration with nursing. These role groups are all faced with daily challenges they must also work around. Additionally, our colleagues trained in disciplines outside of health care often bring forward new ideas and expertise to develop innovations but lack the domain expertise in health care. By opening the program beyond nursing, we can expand on the inter-disciplinary activities already ongoing in the School of Nursing.
Describe similar programs nationally, regionally, or in Connecticut.

The current U.S. market competition for this proposed Healthcare Innovation certificate program is limited to a few alternative options for prospective students. We conducted a search of nursing and healthcare innovation programs offered in Schools of Nursing and beyond. A summary of current available programs is provided below and grouped according to certificate programs and Master's Degrees.

Certificate Programs:

In the discipline of nursing, there are two innovation certificates currently available in the United States. One of the two is a Nursing Innovation post-baccalaureate certificate at Drexel University. This certificate is offered online and requires 19 credit hours of study. The second is a Healthcare leadership and innovation certificate currently enrolling its first cohort in 2019 at The Ohio State University.

Master's Degrees:

Drexel University offers a Master’s degree in Nursing Innovation (45-48 credits). The Ohio State University also offers a MS in Healthcare Innovation (34 credits) that has had over 20 students in its first year and over 40 students in the second year.

While a formal degree in nursing innovation may be beneficial to some students, we hesitate to lead with that as the starting point to educate nurses and healthcare professionals. *We do not want to set the precedent that to innovate, one must first have a degree in innovation.*

Aside from Drexel University and The Ohio State University, a few other nursing schools across the United States are beginning to introduce innovation into their infrastructure. These Universities include Arizona State University, University of Tennessee, Duke University and the University of Iowa. We were not able to uncover an educational framework in the manner in which we have proposed at these universities.

Describe the program learning outcomes (upon successful completion of the program, students will be able to...)

Students who successfully complete the healthcare innovation certificate program will graduate with foundational knowledge skills and attitudes of healthcare innovation. Graduating students will be prepared to 1) develop new sustainable innovations in healthcare within organizations (e.g., intrapreneurial) or external as emerging entrepreneurial endeavors; 2) lead healthcare organizations (e.g., hospitals, academic settings) to support a culture that embraces new ways of approaching problems through divergent thinking patterns; 3) teach healthcare innovation in academic settings and/or provide continuing education in healthcare settings on the topic.

Curriculum information

Total number of credits required: 12 (4, 3-credit courses)
Required courses

List the course number, title, and number of credits for each required course in the program.
NURS 5111 Healthcare Innovation Theory and Application (3)
NURS 5112 Healthcare Opportunities for System Level Solutions (3)
NURS 5113 Developing and Leading a Sustainable Culture of Healthcare Innovation (3)
NURS 5114 Healthcare Innovation Development (3)

Elective courses

List the course number, title, and number of credits for each elective course in the program.
There are no elective courses.

Detailed course information

<table>
<thead>
<tr>
<th>course</th>
<th>instructor</th>
<th>frequency</th>
<th>approval status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 5111</td>
<td>Tiffany Kelley (instructor)</td>
<td>Spring</td>
<td>Course approved by SON Development of online courses to begin May 2019</td>
</tr>
<tr>
<td>NURS 5112</td>
<td>Tiffany Kelley (instructor)</td>
<td>Fall</td>
<td>Course approved by SON Development of online courses to begin May 2019</td>
</tr>
<tr>
<td>NURS 5113</td>
<td>Tiffany Kelley (instructor)</td>
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</tr>
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<td>Tiffany Kelley (instructor)</td>
<td>Fall</td>
<td>Course approved by SON Development of online courses to begin May 2019</td>
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Tiffany Kelley PhD MBA RN will be the faculty responsible for developing all 4 courses for the Healthcare Innovation Certificate program. Once all 4 courses are developed, we anticipate students would be able to complete the program in two semesters by taking two courses in the Fall and two in the Spring.

Program evaluation

The program will be evaluated through a combination of indicators:

1) Course Evaluations - The Healthcare Innovation Certificate Program Director will monitor the course evaluations at the end of each course that are part of the certificate. We will also add a program evaluation upon completion of all 4 courses to understand the students’ evaluation of the program in its entirety.

2) Certificate Completion – The percentage of students who enroll in the certificate program and complete all 4 courses will be tracked over time.

3) Job Placements post Certificate Completion - The Healthcare Innovation Certificate Program Director will monitor the job placements and/or innovation development efforts of the graduating students.
4) **Exit Interviews** – Each student that graduates from the post-baccalaureate Healthcare Innovation certificate will be offered an opportunity for an exit interview to gain additional insights about the certificate program, the ways in which it prepared them to be healthcare innovators, and what adjustments they would suggest to strengthen the program.

**Financial resources**
The four courses will be developed with the support of CETL. The courses will be taught by Dr. Kelley. Matriculated students and non-degree students are eligible to enroll in this program. The program will be fee based.

**Facilities/Equipment/Library/Special resources**
None.

**References:**

American Nurses Association (n.d.). ANA Membership. Retrieved from:

https://www.nursingworld.org/ana/.


